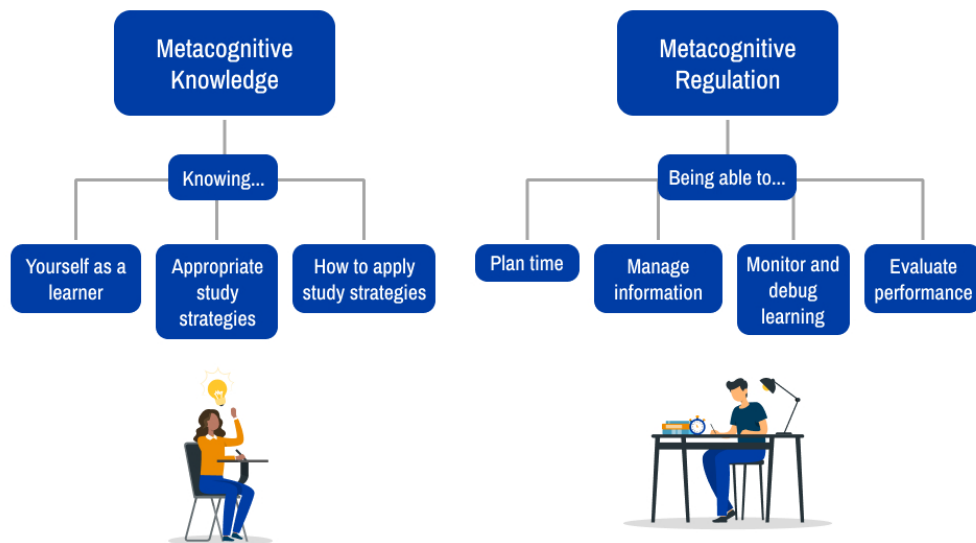




Metacognition has two domains: Metacognitive knowledge, and metacognitive regulation. Benefits of practicing metacognition include increased academic performance, increased ownership of one's learning, and reduction of medical errors. Being metacognitive is necessary for lifelong learning. We can instill metacognition in our learners through dedicated instruction, exam wrappers, and reflective writing and journaling.



Retrieval practice is one way of engaging in metacognition and serves as formative assessment for the learner. When applied appropriately through a pattern of studying, retrieval, reflection, and feedback, retrieval practice can have direct positive effects on learning. Unfortunately, retrieval practice is not always used in the best way. To be most effective, information must be actively brought to mind which can be challenging. This can lead learners to avoid the strategy, not realizing the long-term benefits of retrieval. Educators should create opportunities for retrieval and explain the benefits clearly to learners.

Elaboration is one additional strategy that can improve metacognitive knowledge. Here, trainees ask or are asked “how” and “why” questions to expand their learning beyond facts and better organize their knowledge. The process of *trying to* figure out the answer is helpful for learning because learners activate related knowledge, creating more integrated knowledge networks. Examples could include “Why do you think this patient requires this [specific treatment]?” or “Can you compare and contrast [two related types of treatment] for this patient?” Educators can use questioning such as this to identify and correct misconceptions or encourage deeper learning.

This CEDAR Conclusion! was developed by Kristina Dzara, PhD, MMSc, Cindy Nebel, PhD, and Adian Ruth, PhD as a durable education resource for our CEDAR Community.

Have colleagues who would benefit from a session on Metacognition? Email CEDAR@health.slu.edu to request.